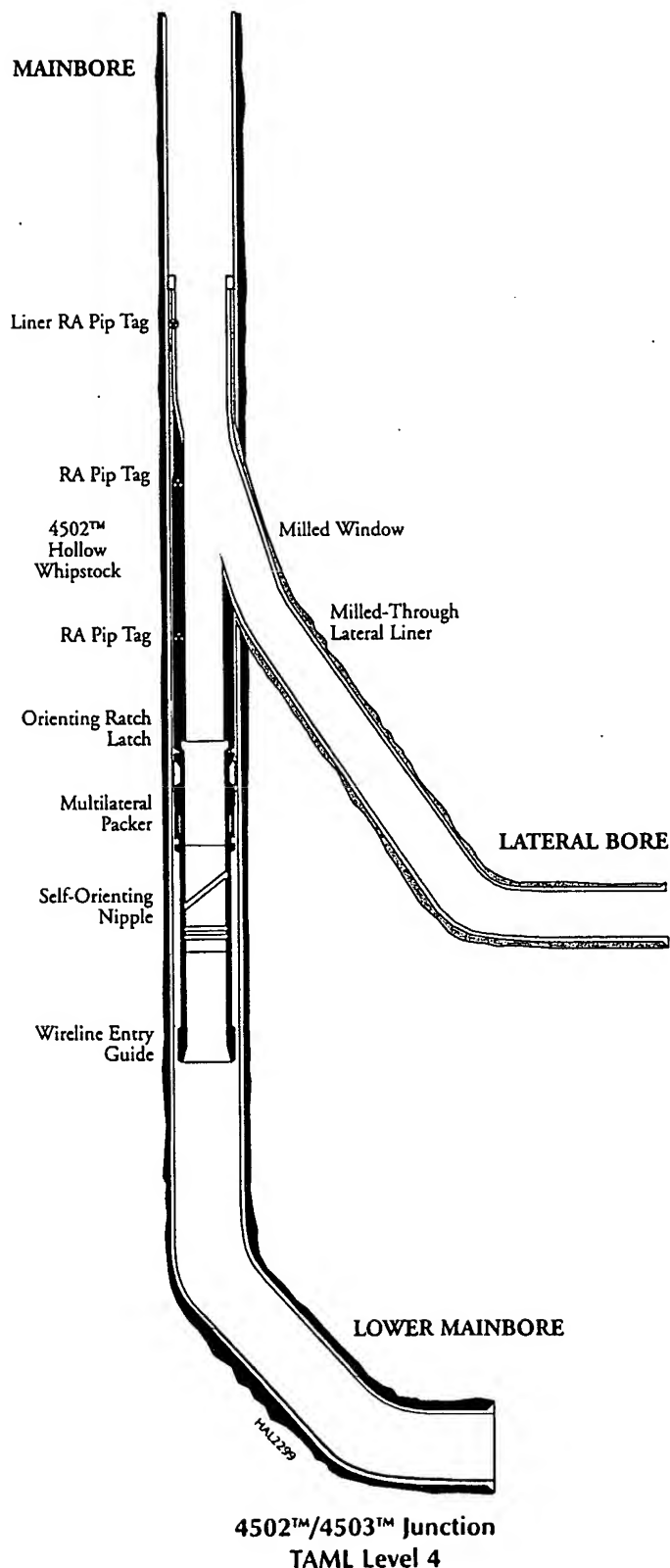


## Multilateral Services Profile

### 4502™/4503™ Metal Mill-Through Systems

### ExitMaster™ Milled Casing Exit Systems



#### Application

The 4502™ and 4503™ systems are designed for use in new or existing wells that require a mechanical and hydraulic seal at the junction. The 4502™ system is used in wells drilled from land or fixed platform locations. The 4503™ system is similar to the 4502™ system except for the addition of Weatherford's SDMC™ compensator to facilitate milling from floating rigs. These systems have typically been used for in-fill developments from slot-constrained platforms. Zones or blocks with large reserves and high production rates (+10,000 BPD) can also benefit from this large bore tubing and completions design.

#### Features

- Hollow core whipstock used to create window
- Full-bore lateral access and reduced mainbore access
- Completed junction composed of overlapping concentric casings
- No limit to liner lap length
- Whipstock not pulled to create junction

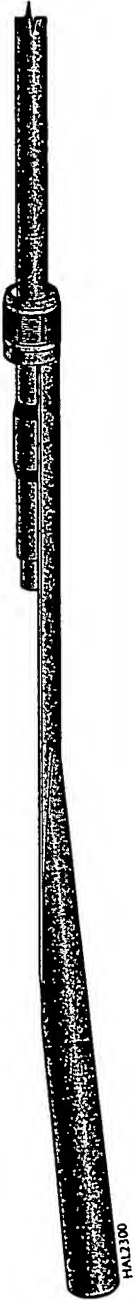
#### Benefits

- Applicable to existing wells (re-entry)
- High mechanical integrity of level 4 junction
- Hydraulic isolation of level 4 with cement
- Full liner integrity during lateral completions and stimulation prior to mill through
- Permanent downhole reference for depth and orientation
- Junction can be completed with LRS™ window bushing for through-tubing access to lateral and mainbore
- Compatible with all SmartWell™ designs

# Multilateral Services *Specifications*

## 4502™/4503™ Metal Mill-Through Systems

### ExitMaster™ Milled Casing Exit Systems



#### Typical Installation Sequence

- Remove completion from existing well.
- Run in hole and set packer and whipstock.
- Mill window in main well casing (three-step operation).
- Drill lateral as required.
- Run in hole lateral liner and cement as required.
- Install mill guide and mill-through lateral liner.
- Install LRS™ window bushing (optional).
- Install upper completion and flow well.

4502™/4503™ System Specifications		
TAME Level 4		
System casing size	7 in. 177.8 mm	9-5/8 in. 244.5 mm
Casing weight	26.32 lb/ft	45.5 lb/ft
Window type	Milled	
Lateral liner type	Metal mill-through	
Lateral hole size	6-1/8 to 5-7/8 in. 152.4 mm	8-1/2 in. 215.9 mm
Lateral liner size	4-1/2 in. 114.3 mm	7 in. 177.8 mm
Lower mainbore access	3.75 in. 95.25 mm	6 in. 152.4 mm
Pressure isolation from above/below	5,000 psi/5,000 psi	5,000 psi/5,000 psi

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DRILLING SERVICES

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